

Application No.: 09/745,157  
Amendment dated: April 22, 2004  
Reply to Office Action of December 15, 2003

**b.) Remarks**

Claims 1-6 and 8-31 are pending in this application. Claims 1, 8, and 19-22 have been amended in various particulars. Claim 7 has been cancelled without prejudice or disclaimer.

The drawings were objected to under 37 C.F.R. § 1.83(a). Specifically, it was asserted that the features of claim 13 were not shown. Attention is directed to the incorporation by reference on page 6 of the instant specification. Specifically, these features are shown in the drawings of U.S. Appl. No. 09/648,263.

Claims 19 and 20 were rejected under 35 U.S.C. § 112, second paragraph, as being indefinite. The suggested changes to claims 19 and 20 have been made. Applicants thank Examiner for the helpful suggestions.

Turning now to the merits, claims 1, 7, 8, 14, 15, 21, 22, 26, 28, and 30 were rejected under 35 U.S.C. § 102(e) as being anticipated by U.S. Pat. No. 6,532,087 to Ransford, *et al.* This rejection is respectfully traversed for the following reasons.

The Ransford, *et al.* system is directed to a circuit for measuring the Q-factor. This metric is used to assess the quality of the digital optical signals that are transmitted over the optical link.

In contrast, the present invention is directed to a channel inventory system. It is not concerned with the quality of the transmitted digital information, but simply whether or not the optical carriers of the separate WDM signals are present or not. Specifically, it simply determines channel inventory of the WDM signal.

Thus, with reference to the instant claims, Applicants respectfully take the position that the Ransford, *et al.* system does not scan a tunable optical filter across a pass band and generate a filtered signal corresponding to the spectrum of the WDM signal as described in the rejected claims. Instead, the Ransford system measures the Q-factor of an individual signal in the WDM signal.

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Moreover, it does not show or suggest comparing the instantaneous pass band spectral position of the tunable filter to a response of the decision circuit to determine the channel inventory of the WDM signal.

Claims 1, 7, 8, 15, 21, 22, 26, 28, and 31 were rejected under 35 U.S.C. § 102(b) as being anticipated by U.S. Pat. No. 5,838,488 to Kobayashi. This rejection is respectfully traversed for the following reasons.

Possibly somewhat more relevant, the Kobayashi patent is directed to a system that has a short-term integrator 40 that is connected to the output of O/E converter 23 to integrate each of the wavelength components selected by the tunable filter 22 over time. Further, it teaches that the presence of an optical signal in the scanned wavelength can be indicated.

In contradistinction to the present invention, however, the output of the Kobayashi comparator 41 is simply counted by a binary counter 42. See, generally column 3, beginning at line 45. In short, the Kobayashi patent describes a system that only counts the number of channel signals or carriers in the WDM signal.

The present claimed invention describes comparing an instantaneous pass band spectral position of the tunable filter to a response of the decision circuit to determine the channel inventory of the WDM signal. In short, each of the independent claims requires determining whether an individual signal is present or not as a function of wavelength. This is not suggested by the Kobayashi patent, which simply counts signals.

For the same reasons, each of the obviousness rejections based on the combination of the Ransford, *et al.*, Vanoli, *et al.*, Bach, *et al.*, and Delavaux, *et al.* patents, as well as the Salomaa publication are respectfully traversed.

Thus, for the foregoing reasons, Applicants respectfully request withdrawal of the pending rejections.

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Applicants believe that the present application is in condition for allowance. A Notice of Allowance is respectfully solicited. Should any questions arise, the Examiner is encouraged to contact the undersigned.

Respectfully submitted,

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